



AMHERST *Massachusetts*

OFFICE OF THE SUPERINTENDENT OF PUBLIC WORKS
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Department of Public Works Fiscal Year 2008

It is the end of another fiscal year and time to complete our annual report on what was accomplished. I always start the annual report process by reviewing what was reported last year. When I'm really having a hard time writing this I tend to look back over the reports from earlier times. I like the simplicity of those times, the crisp clear description of what was done, any personnel changes and a status of the DPW. Those days are long gone. We now dwell in the world of MBA's and maximizing results while minimizing input. Many people will pour over the information here and the budget book and develop long discussions about tweaking this to be able to give more here or vice versa. No one wants to acknowledge that maybe our method is not working and we need to start with a clean slate.

Last year I said it had been our worst year fiscally to date. Unfortunately we were able to exceed last year's problem this year. This year we required \$170,000 dollars to cover our DPW Budget shortfall and the Snow and Ice deficit, the S&I budget was over by \$120,000. Of the funds that were used to cover this shortfall \$70,000 was from unexpended General Fund allocations. Most of this money came from vacant positions in other Departments, positions that are scheduled to be filled in FY 09. Our deficit comes from a combination of higher energy costs and continued support of other Town and School programs. Even though we will begin FY 09 with the same budget as last year, I expect that our deficit will be greater than FY 08.

We are in a pattern that will continue to worsen as the Country slips into a recession and possibly a depression. The day I wrote this it was reported that the Maine DOT was suspending all asphalt road projects until the price for liquid asphalt improves. The price of liquid asphalt has more than doubled this year. These factors are having an adverse impact on the Town as well and I do believe Town residents, at least Pelham residents are beginning to notice. Our General fund budget starts every year \$120,000 in the red. This is the amount of work the Department will charge off to projects and capital work, work that can generally only be completed during the 8 month construction season. This is also the prime time period to do more permanent pothole repairs and other structural road repairs. We ran out of funds to patch potholes in April of 2008. A full two months before the end of the fiscal year.

Well enough of the doom and gloom. In closing, I hope you find this information helpful and that you realize that what we accomplish is not due to one person. It is due to an entire department of Union and Non-Union personnel willing to do their job and a little more to reach a common goal with the little bit of money we have.

Respectfully submitted,

Guilford B. Mooring II, P.E.
Superintendent of Public Works

CONSTRUCTION AND MAINTENANCE

The personnel of the Highway Division in addition to their normal maintenance completed the following projects during FY 08:

HIGHWAY RESURFACING:

The following streets and roads were resurfaced, shimmed or reclaimed this year between July 2007 and November 2007 for a total of 4.2 miles. Over 1,700 ft of sidewalk was repaved on Shays Street. Additional concrete sidewalk and curbing was added along the northerly side of Pray St. New drainage was also incorporated into the Pray St Parking Lot. The DPW also paved the parking lots of the adjacent businesses at cost. In addition to the resurfacing work DPW crews also installed approximately 1,200 tons of bituminous asphalt pavement patches.

<u>Reclamation & 3"Overlay</u>	From	To	Length h (ft)	Width (ft)
		Joe B's Corner		
North East St	Shutesbury Rd	(House #689)	1,480	23
South East St	Bay Rd	House #1488	2,265	23
Hulst Rd	House #28	Town Line	2,875	20
Shays St	West St (Rte 116)	House #288	3,575	22.5
College St	South Whitney St	South East St	2,040	26
Pray St (+Parking Lot 1300sqft)	Triangle St	East Pleasant St	495	27.5
<u>Reclamation & 2"Base</u>				
Henry St	Market Hill Rd	Shutesbury Rd	5,600	22
Stony Hill Rd	Gatehouse Rd	Aubinwood Rd	1,545	30

SIDEWALK AND STORM DRAINAGE PROJECTS

Downtown Streetscape Improvements (Phase IV) North Pleasant St. and Pray St

The downtown sidewalk improvements continued this year with the following work completed:

New granite curbs	990 ft
New concrete sidewalk (8'wide)	106 cu yds
Sanitary Sewer pipe	30 ft
Stormwater Drain structures	4 ea
New Street Lights & conduit	4 ea

Henry Street drainage and resurfacing project;

Bituminous Concrete Curb	2,480 ft
Headwalls Completed	8
Drainage structures raised	30

OTHER PROJECTS:

1. Lincoln Ave Speed Cushion Trial
2. New Comfort Station at Groff Park
3. Roadway detail painting at intersections and parking lots
4. Ruxton Gravel Yard Site Reclamation work
5. Amherst Regional Middle School Rear Access Road
6. Catch basin repairs 25
7. Isolated pipe repairs 15
8. Sewer repairs 8

TRANSPORTATION IMPROVEMENT PROGRAM (T.I.P.)

The following TIP projects are underway this year:

1. Design of the Atkins Corner Intersection improvements
2. University Drive Corridor improvements
3. Construction of Meadow Street Bridge Replacement (Mass Highway) Completed
4. Construction of East Leverett Road Bridge Replacement (Mass Highway) In Progress
5. Design of Main Street Bridge Replacement (Mass Highway)

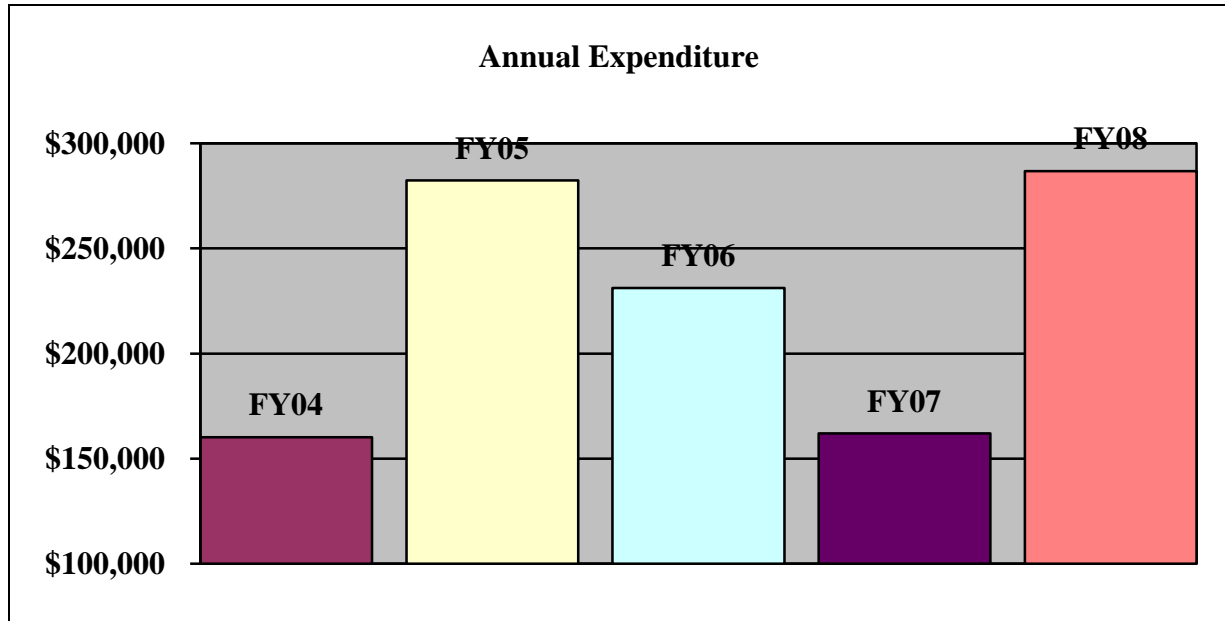
SANITARY SEWER DIVISION**SEWER MAINTENANCE**

Investigated 106 sanitary sewer complaints and corrected 30 stoppages in the collection system. Problematic sewer locations are flushed and cleaned on a quarterly basis. The DPW in conjunction with Dukes Inc, chemically treated 5,617 feet of sewer line for root intrusion.

Matt Loven

Highway Division Supervisor

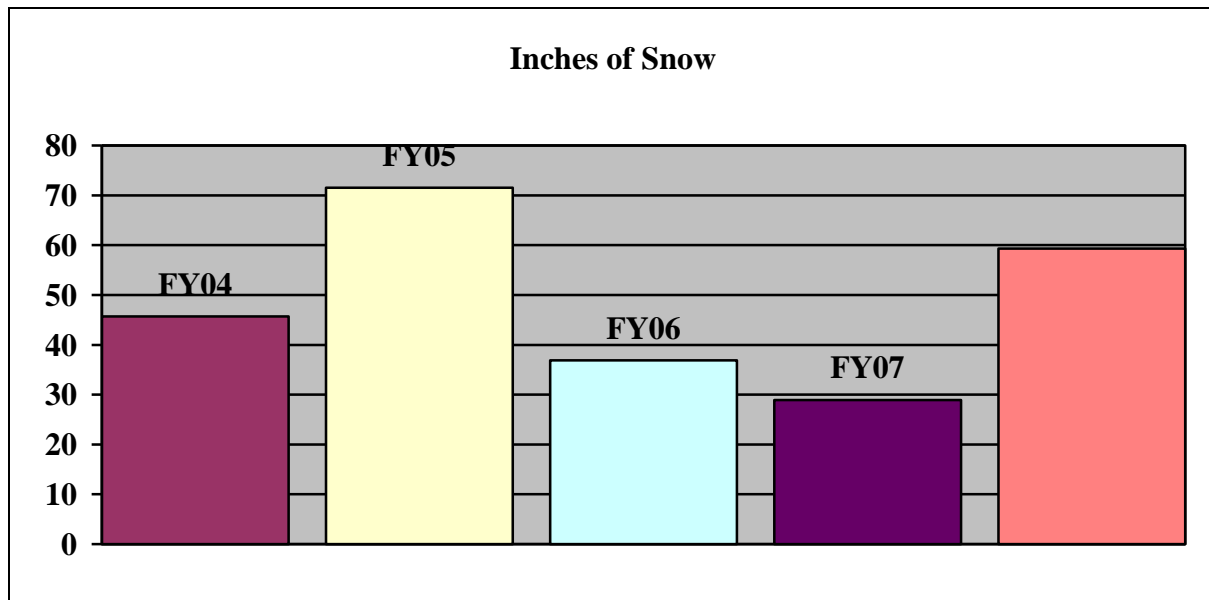
SNOW AND ICE REMOVAL



There were 23 snow and ice storms, with a total of 59.3 inches of snow.

4,249 tons of sand was used. 1,418.96 tons of salt was used.

17,503 gallons of Ice Band Magic were used on the roadways and sidewalks.



Year	Cost	Snow (inches)	No. of Storms
FY 04	\$160,181	45.7	27
FY 05	\$282,334	71.5	26
FY 06	\$231,120	36.9	20
FY 07	\$161,930	28.9	15
FY 08	\$286,777	59.3	23

TREE AND CEMETERY DIVISION

The Tree Division removed a total of 213 street trees during the past year. Trees removed were: 92 American elm, 43 sugar maple, 13 red maple, 3 red maple logs, 3 silver maple, 10 white pine, 12 white ash, 2 white oak, 1 black cherry, 1 black locust, 2 shagbark hickory, 2 yews, 1 linden, 2 pin oak, 3 Norway maple, 5 cherry, 4 locust, 1 apple, 1 crab apple, 5 hemlock, 1 Bradford pear, 2 red oak, 1 poplar, 1 fir, 1 arborvitae and 1 cedar.

During FY 08, 3 trees were planted.

30 tree stumps were removed in FY 08.

In addition to tree care responsibilities this department consisting of three full-time employees and one part-time summer employee is also responsible for the care and maintenance, including burials at the West, North and South Cemeteries.

Burials in FY 08

West Cemetery	0
North Cemetery	10
South Cemetery	24

PARKS DIVISION

The Parks Division of five full-time employees and two part-time summer staff continue the day-to-day maintenance of our parks and commons, together with the maintenance of twenty-three softball, baseball, football, lacrosse and soccer fields and many multi-purpose areas.

Special Projects:

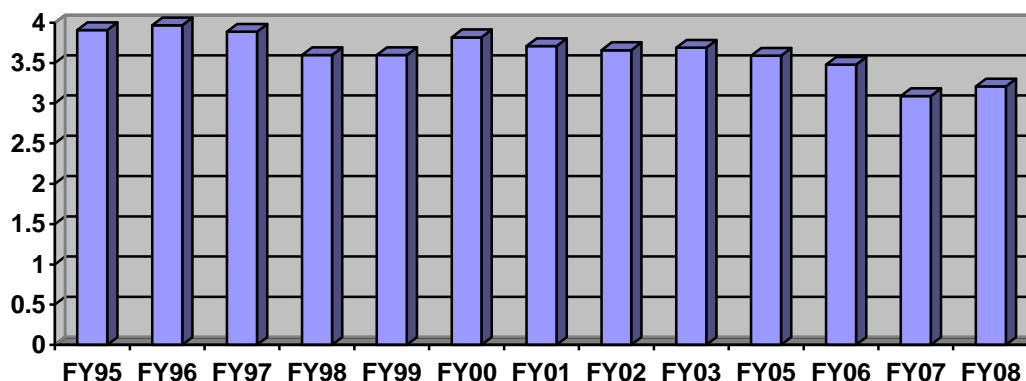
No large special projects were worked on this year due to funding.

WATER TREATMENT & DISTRIBUTION

Water Consumption: The average daily water consumption for FY 08 was 3.21 million gallons; the peak day, September 6, 2007 was 4.364 million gallons. The total FY 08 rainfall was 51.75 inches well over the annual average of 42 inches.

The figures below summarize the amount of water pumped, the revenue generated and the chemicals used to treat the water. Chlorine, ozone and ammonia are used for disinfection. Potassium permanganate is used for iron and manganese removal at Well #4. Polymer is used for water treatment at the Atkins and Centennial water treatment plants. Fluoride is added at a level of 1 part per million to reduce tooth decay and sodium hydroxide is used to elevate the pH of the water for corrosion control.

DAILY WATER CONSUMPTION IN MILLION GALLONS



Water Services

	FY 06	FY 07	FY 08
New services installed	31	28	15
Total water services	6,369	6,428	6,225
# Meters Replaced	294	238	265

Chemical Usage - All Sites

Chlorine (lbs.)	15,976	18,659	18,577
Sodium Hydroxide (Gals)	14,225	15,171	16,063
Polymer (gals)	2,289	3,189	2,696
Potassium Permanganate (lbs.)	1,924	393	485
Ammonia (lbs.)	3,079	3,266	3,525
Sodium Fluoride (lbs.)	17,275	19,180	16,910
Ozone	1,289	443	887

Monthly Finished Water Pumping in Million Gallons

Month	FY 06	FY 07	FY 08
July	102.58	101.175	94.780
August	100.73	96.554	97.137
September	116.66	100.685	115.458
October	108.50	103.192	112.647
November	101.68	87.706	93.884
December	95.30	88.556	90.791
January	80.36	79.715	81.109
February	86.90	95.925	94.334
March	91.47	94.104	91.286
April	97.97	96.633	101.070
May	103.77	100.053	102.604
June	89.21	83.838	95.728
Total	1,175.00	1,128.140	1,170.830
Daily Average	3.22*	3.09*	3.208
Maximum Daily	5.128 (9/15/05)	4.143 (8/02/06)	4.364 (9/06/2007)
Minimum Daily	2.043 (12/27/05)	2.241 (11/25/06)	1.894 (8/14/2007)

	FY 06	FY 07	FY 08
Wells #1 & #2	103	167	177
Well #3	364	314	340
Well #4	191	44	47
Well #5	2	10	16
Pelham Reservoirs	231	316	304
Atkins Reservoir	284*	270*	285
Total Water Pumped	1,175	1,122	1,170
Average Daily (millions)	3.22	3.09	3.208

* Quantity adjusted for meter error 200 gpm

Water Billed – Cubic Feet

	FY 06	FY 07	FY 08
UMass	40,488,216*	36,835,279*	37,209,500
Amherst College	6,912,600	5,999,100	6,496,400
Hampshire College	3,071,000	2,667,300	3,138,100
Town	75,862,600	76,752,100	75,599,958
Municipal	1,037,500	1,172,300	1,196,900
Special Water Readings	326,700	8,751,000	2,042,700
Other –Reuse	134,900	538,200	2,565,900
Un-metered Use	5,000,000	5,000,000	5,000,000
Adjustments (minus)	356,500	756,600	(875,239)
Total Metered (ft³)	133,190,016	133,468,879	132,374,219
Total Metered (million gals.)	999	1,001	993
% Unaccounted	15%	10.8%	15%

*Adjusted for meter error
Total Revenue Rounded– Dollars

		FY 06	FY 07	FY 08
UMass	Water	\$806,313	\$797,273	\$1,084,056
	Sewer	\$874,444	\$878,273	\$1,114,630
Amherst College	Water	\$147,441	\$146,790	\$197,812
	Sewer	\$165,965	\$159,548	\$195,000
Hampshire College	Water	\$65,588	\$65,010	\$95,132
	Sewer	\$73,730	\$71,618	\$94,152
Town	Water	\$2,068,281	\$1,837,063	\$2,337,082
	Sewer	\$2,168,192	\$1,813,176	\$2,072,189
Municipal	Water	\$24,904	\$31,913	\$39,885
	Sewer	\$24,802	\$32,057	\$35,862
Special Reading	Water & Sewer	\$15,607	\$293,647	\$93,790
Adjustments	Water & Sewer		(\$60,901)	(\$43,034)
Other	Water & Sewer	\$6,492	\$29,991	0
Total Revenue		\$5,436,147	\$6,095,459	\$7,316,557

WATER QUALITY DATA:

Bacterial Samples: Bimonthly samples were analyzed from 27 sites around town and all samples were negative for fecal or E Coli bacteria.

Fluoride: Fluoride was added to all sources at a level of 1.0 ppm to prevent tooth decay.

Treatment Plant Performance: Both the Atkins (Shutesbury) and Centennial (Pelham) Water Treatment plants produced water that meet the requirements set by the Environmental Protection Agency (EPA). The average turbidity from Atkins was 0.10 N.T.U. and from Centennial 0.08 N.T.U. The EPA requires that these readings be less than 0.3 N.T.U. in 95% of the samples. Total Trihalomethanes, a byproduct of chlorine disinfection, averaged 33.9 ppb from quarterly sampling at eight different sights around town. The EPA limit is 80 ppb. Haloacetic acids, another by product of chlorine disinfection, were also analyzed quarterly at 8 different locations and the average value was 39.1 ppm, well below the EPA limit of 60 ppm.

Water Rate: The water rate for FY 08 is listed below.

\$3.00 hundred cubic feet (750 gallons)

The average water cost to an Amherst resident, based on an annual usage of 120 HCF, is about \$360/year. This number is below the State average.

Information: More information about water treatment and quality can be accessed on line at www.epa.gov or www.mass.gov and search for drinking water.

Cross Connection Program: The cross connection program was established in 1989 under Massachusetts Drinking Water Regulation 310 CMR 22.22 to prevent cross contamination of the water supply with hazardous substances. Water department staff tests these devices twice annually.

Total Backflow Devices

	FY 06	FY 07	FY 08
<i>Town</i>	59	57	59
UMass	385	400	440
Amherst College	100	97	106
<i>Hampshire College</i>	28	30	31
Commercial	110	129	130
Residential-Irrigation	18	34	43
Total	700	747	809

Chemical Analysis: The following water tests were recently analyzed and all levels of substance in the water were below the Maximum Contaminant Level set by the Safe Drinking Water Act. More information is available online at www.amherstma.gov, go to department – water – ccr.

- Volatile Organic Compounds – Solvents, Petroleum Products
- Inorganic Compounds – tested annually at all sources
- Fluoride – Daily at all sources
- Synthetic Organic Compounds – Herbicides and pesticides - 2006 at all sources
- Arsenic
- Perchlorate
- Radioactive Substances
- Lead and Copper

SPECIAL ACTIVITIES

A. Well 2: Tighe & Bond Engineering of Westfield, Massachusetts was retained to engineer the replacement of Well 2. A new 18” well, 85’ deep was dug and a 75 H.P. submersible pump was installed by R.E. Chapman Company at a cost of \$168,300. Town staff installed all the wiring and controls.

B. Atkins Water Treatment Plant: Weston and Sampson Contractors completed emergency repairs of the three (3) trident treatment units. The backwash diffusers were removed and all the gaskets were replaced. The anthracite and sand in all three (3) filters was removed and replaced. All interior metal surfaces were sandblasted and repainted at a total cost of \$257,800.

C. Baby Carriage Brook Water Treatment Plant: The media in all four pressure filters at this facility were cleaned to improve performance by Floran Technologies.

D. Hybrid Vehicle: A new Ford Hybrid Vehicle was added to the fleet to reduce gas consumption.

E. Water Management Act Permit: Our Water Management Act Permit was reapplied for and approved to withdraw the following daily volumes of water until 2018:

Well 1 – 650,000 gpd

Well 2 – 360,000 gpd

Well 3 – 1,480,000 gpd

Well 4 – 1,740,000 gpd

Well 5 – 500,000 gpd

Atkins Reservoir – 1,250,000 gpd

Pelham Reservoir – 700,000 gpd (unofficial).

F. Baby Carriage Brook Water Treatment Plant: The underground oil storage tank was removed in FY 08. The state reimbursed us for about half the cost.

G. Water Main Breaks: Nineteen water main breaks occurred in FY 08.

H. Amity Street Water Main Improvements: Tighe & Bond Engineers of Westfield, MA completed the engineering for a new water main on Amity Street from University Drive to Blue Hills Road.

I. Meter Calibration: All master meters (large meters) in town were calibrated in August, 2007.

Robert E. Pariseau
Director of Water Resources

WASTEWATER TREATMENT PLANT

The treatment plant and 21 pumping stations continue to be well operated and maintained by plant staff. Operational costs are rising due to the large amount of energy consumed by the treatment processes.

The plant was constructed in 1978 and no major capital costs are expected in the next few years. Regular plant updates and equipment replacements have kept the treatment facilities current. Many plant improvements, have been accomplished by talented plant staff, and resulted in lower operational and capital costs and a sewer rate of \$3.00 per hundred cubic feet (750 gal) well below the state average.

Flow Data

The Wastewater Treatment Plant treated 1.48 billion gallons of wastewater in FY 08. The highest daily flow rate recorded was 13.8 million gallons per day on 2/13/08.

	FY 06	FY 07	FY 08
<i>Inches of Rainfall</i>	56.98	42.26	51.77
Average Daily Flow in Million Gallons	4.42	3.97	4.04
Highest Day in Million Gallons	11.05 (10/15/05)	10.35 (4/16/07)	10.02 (2/13/08)
Chemicals Used			
Chlorine (lbs.)	9,480	9,535	9,800
Polymer (lbs.)	2,680	2,999	2,993
Potassium Permanganate (lbs.)	3,080	2,530	2,090

Chlorine is used to disinfect the wastewater prior to discharge into the Connecticut River. Polymer is used to thicken sludge as part of the disposal process. Potassium permanganate is used for odor control.

Treatment Efficiency

The water that is discharged into the Connecticut River is tested in our treatment plant laboratory. Many process control tests are performed to optimize treatment and produce the best quality effluent possible. The Environmental Protection Agency (EPA) and Massachusetts Department of Environmental Protection (DEP) monitor our activities and measure our effectiveness by the parameters listed below (annual averages). No violations of our EPA discharge permit occurred in FY 08.

Parameter	EPA Limit	FY 06	FY 07	FY 08
Biochemical Oxygen Demand (mg/L)	25	4.4	6.0	4.0
Total Suspended Solids (mg/L)	30	3.1	4.0	4.0
Chlorination (mg/L)	1.0	0.44	.40	0.45

Septage Received

The treatment plant receives septage from residential septic tanks pumped from the towns of Amherst, Pelham and Shutesbury. Below is a summary of the number of septic tanks (usually 1000 gallons) that were pumped.

Town	FY 06	FY 07	FY 08
<i>Amherst</i>	78	68	115
Pelham	40	40	66
Shutesbury	69	72	111
Total	187	180	292

Wastewater Reuse

The University of Massachusetts uses treatment plant effluent for make-up water at the existing steam generation facility.

	FY 06	FY 07	FY 08
Million Gallons	53	55	58

Sludge Data

Sludge is the residual organic material left after the wastewater is treated. We currently thicken these solids on-site, and Casella Waste Management is under contract to deliver the liquid sludge to an EPA-approved sludge incinerator. Sludge in FY 08 was transported to three incineration facilities: Fitchburg, MA; Millbury, MA; and Naugatuck, CT.

Sludge Data	FY 06	FY 07	FY 08
Total Gallons (transported)	3,677,100	3,901,000	4,126,500
Total Dry Tons	1,011	1,052	1,104
% Solids	6.6	6.6	6.6

Month	Total Gallons	Ave. % Solids	Total Dry Tons	Dry Tons Per Day
July	234,000	6.7	64.35	2.1
August	207,000	7.3	62.30	2.0
September	347,500	7.2	103.79	3.5
October	381,000	6.9	106.44	3.4
November	378,000	6.7	104.56	3.5
December	369,000	6.3	97.76	3.2
January	225,000	7.3	68.45	2.2
February	412,500	6.8	116.22	4.0
March	469,500	5.2	101.36	3.3
April	433,000	6.0	107.73	3.6
May	436,000	5.9	107.08	3.5
June	234,000	6.6	64.24	2.1
Total	4,126,500		1,104.28	
Average	343,875	6.6	92.0	3.0

Power Consumption

	FY 06	FY 07	FY 08
<i>Avg. kWh/month</i>	115,563	102,272	104,729
Avg. kW Demand	354		

Special Activities:

A. WWTP Roof: A new membrane roof was installed on the administration buildings and pump stations at the wastewater treatment plant, replacing the 1978 original roof.

B. West St Pumping Station: Town staff replaced the existing 1978 vintage emergency power generator at the pumping station.

C. Amherst Fields Pumping Station Generator: Treatment plant staff installed a new emergency power generator at the pumping station.

D. Aeration Tank Weirs: Treatment plant staff began the removal, fabrication and replacement of 6 movable weirs. These devices control the tank and oxygen levels in the treatment units.

E. Demolition: Treatment plant staff demolished an original equipment (1978) 3 meter vacuum filter and associated pumps. This unit was originally used for sludge dewatering when the plant was first put in service.

F. Primary Clarifier Valves: Three 12 inch tank drain valves were replaced by plant staff on the primary clarifiers as well as one 10" valve on the aeration tanks.

G. Flowmeter: Plant staff designed purchased and installed a new flowmeter and access manhole on the 36" effluent line. This flowmeter will allow plant processes to be more accurately monitored and controlled.

H. Hybrid Vehicle: A new Ford Escape Hybrid vehicle was purchased to save fuel while doing the daily checks on the 21 pumping stations.

Robert E. Pariseau
Director of Water Resources

SOLID WASTE AND RECYCLING

Continuing to work with limited resources, the solid waste and recycling program focused energy on community relationship building/collaboration and public education in FY 08. In addition to ongoing collaboration with the Health Department, the Energy Task Force, and the school's contracted food service provider (Chartwells), we established relationships with the Amherst Area Chamber of Commerce, Promoting Downtown Amherst (a downtown Chamber subgroup), and the *Taste of Amherst* organizing committee. Recycling and Solid Waste had a continued presence at the Sustainable Energy Fair (fall 2007), and at the revitalized Earth Day 2008 celebration, for which we played a major organizing role. The website continues to make information available to those with computer access.

Grants Awarded

Amherst was awarded 200 blue curbside recycling bins from the Springfield Materials Recycling Facility (MRF) Advisory Board. The Massachusetts Department of Environmental Protection's (DEP) Municipal Waste Reduction Grant also awarded resources valued at \$2,800 to the Town of Amherst. We received 20 rain barrel discount vouchers, 100 Home Composting trifold brochures, 3000 bi-lingual (English/Spanish) recycling education door hangers, and an in-kind technical assistance grant. The technical assistance grant focused on Amherst's school composting program. After a preliminary visit from the assigned DEP employee, the project was given the goal of "attempting to implement an organics compost program in most of all of the Town's schools that can be sustained on a long-term basis without outside funding. This effort continues and as of July 2008, no final DEP recommendations or report has been filed.

Outreach and Public Education

General Amherst Population

Sustainable Energy Fair – For the second year in a row, members of the Recycling and Refuse Management Committee (formerly the Solid Waste Committee) joined the recycling coordinator in staffing a booth at this September 15 event on the Town Common. Informational brochures about recycling, composting, and waste reduction were provided and recycling and compost bins were available for sale. Informational posters and a simple quiz question about plastic bottles were also highlighted at the booth. Those able to answer the quiz received a small prize.

Amherst Grows Green – The recycling coordinator worked with the Chamber of Commerce and members of the Public Shade Tree Committee to organize a day-long Earth and Arbor Day event downtown on April 26. The Earth Day portion of the event included a puppet show, three speakers (on topics of organic lawn care, legislative green initiatives and home energy conservation), booths/informational tables along the sidewalks of North Pleasant and a "Go Green" scavenger hunt involving a number of downtown merchants. An advertisement was placed in the Amherst Bulletin and on the Town Website, and posters/flyers were hung about Town to advertise the event. The scavenger hunt was created so that local businesses can tout the earth-friendly actions they take, whether it be recycling material, selling recycled merchandise, using energy-efficient restaurant practices, or composting food waste. Posters highlighting these actions were posted inside participating businesses, and participants were asked to answer five questions (e.g. "List 3 stores that recycle cardboard") to be eligible for a

prize drawing. The Recycling and Refuse Management Committee staffed a booth on the street with recycling, rain barrel and composting information, and a paper recycling quiz was offered with prizes given to high scorers. For funding and other reasons, the Shade Tree Committee chose to hold a series of separate events at the library, Amherst Cinema, on the North Common and in Sweetser Park as the Arbor Day portion of the event.

Taste of Amherst – In an attempt to gain a better understanding of the public event waste situation, the recycling coordinator volunteer to assist with this year's Taste of Amherst event. Two volunteers from the Recycling and Refuse Management Committee worked with the recycling coordinator collecting recyclables and trash for one evening of the four day June event. Several key improvements were noted including: lack of storage location for recyclables (increase of non-deposit bottles caused storage challenge), need for side-by-side recycling and garbage bins (otherwise people don't distinguish the two), and the need for clearer signage on the recycling bins. We look forward to assisting with the process again next year.

Schools and Youth Education

Composting Program – The composting program continued successfully at two elementary schools: Wildwood and Marks Meadow. Both the custodial team and the school administrators at these schools proved to be strong compost supporters, a factor critical to the program's success. A parent volunteered weekly at Wildwood to act as a compost coach. The parent's fun, lively spirit was infectious and a platoon of enthusiastic student volunteers formed to help coach their peers. TTT Trucking out of Brattleboro, Vermont continues to pick up the food waste weekly and transport it to Martin's Farm in Greenfield.

Trash Free Lunch Day – The second annual "Trash-Free Lunch Day" (a collaboration with Chartwells, the food service organization which held the school lunch contract with Amherst Regional Schools) was again a success in terms of awareness building for students and school employees at the four elementary schools. This year Wildwood Elementary School reduced its trash volume by approximately 90% to a mere 6.5 pounds through diligent composting and reduction of single use containers and utensils.

Educational Presentations – Recycling presentations were given to three Girl Scout troops, and the recycling coordinator co-led an after school environmental club at Wildwood Elementary School. The "Green Team" made gifts out of discarded material, produced and sold an earth-friendly window cleaner, organized a school "earth valentine," visited a solar-powered residence, and constructed energy-efficient model towns and neighborhoods.

Additional Initiatives

Waste Hauler Licensure Change

In fall of 2007, the Amherst Board of Health approved an administrative change in the waste hauler licensure process. The Department of Public Works will now handle the administrative portion of the waste hauler licensure process including communications, processing and distribution. This change was supported by the Recycling and Refuse Management Committee as a means by which better relations and process oversight may be achieved. The Health Department will receive copies of all paperwork and issued licenses and will continue to be responsible for inspections and public health oversight.

ARPS Food Service Selection Committee

In an effort to reduce the amount of single-use serveware in school cafeterias, the recycling coordinator joined the volunteer committee producing the Request for Proposal (RFP) for the new school food service provider. Waste reduction criteria was included in the RFP and reviewed/discussed along with other criteria in determining the winning proposal. A new food service organization, Whitson's, will begin to serve the Amherst Schools in August 2008. While their past waste reduction behavior was unimpressive, their apparent willingness to try new approaches (including purchase of local produce and elimination of white flour) bodes well for future waste reduction collaborations.

Waste Collection and Landfill Diversion

Curbside pickup of trash and recyclables in Amherst continues to be provided by private trash haulers, however, households requesting variances are allowed to bring their recycling and trash directly to the Transfer Station in pre-paid bags. This fiscal year 482 households received variances to Pay as You Throw (PAYT), eliminating their need for a private waste hauler.

Earth Machine composting units, kitchen counter compost pails, recycling bins, and sharps collection containers continue to be available for purchase at the Transfer Station. Rain barrel purchases and MA DEP-sponsored rain barrel discounts were offered to Amherst residents in early spring and distributed in April from the DPW parking lot on Route 116.

In FY 08 the medical waste hauler destroyed 109 pounds of Sharps collected by Amherst's Health Department and Transfer Station. In anticipation of a MassDEP 2009 Sharps landfill disposal ban, the Health Department's Nurse (Julie Federman) and the recycling coordinator worked with a public health intern from UMass to update publicity material and develop an action plan for the Sharps program. The program was renamed the "Safe needle disposal" program to more clearly represent program goals. Publicity for the revised program will commence in FY 09.

The Recycling Center and Transfer Station supports many other landfill diversion programs. The following items are accepted at no charge from residents with current vehicle stickers:

- Clothing (goes to Salvation Army)
- Automotive and rechargeable batteries
- Waste automotive oil
- Leaves & grass clippings
- Christmas trees
- Printer cartridges & cell phones
- Mixed containers
- Mixed paper
- Mercury-bearing items such as thermometers & thermostats.

The option to donate return deposit drink containers to the local food bank continues with a designated bin. Fluorescent bulbs, brush, electronics, household solid waste (bulky items), construction/demolition waste, scrap metal, asphalt, bricks, concrete, wood, paint, tires, appliances and propane tanks are all accepted for recycling/disposal after payment of fees.

Types and quantities of materials diverted via the Transfer Station over a four-year period are shown in the table below. The FY 06 spike in collected paint is attributed to a paint collection procedure change in FY 05.

	FY 05	FY 06	FY 07	FY 08
Chipped Brush/Leaves (tons)	62	34	NA	NA
Electronics (tons)	22	31	32	30
Scrap Metal (tons)	209	242	216	153
HHW in household equivalents	183	116	130	156
Paint (gallons)*	1,079	2,119	1,854	1,532
Tires (count)	678	559	757	461
Appliances	705	870	854	609
Propane Tanks	247	106	139	56

* Oil-based paint and paint products known to contain lead are only accepted during HHW collection days.

The Take It or Leave It and Book Sheds, which allow vehicle sticker owners to swap books and household items, remain very popular. Prolonged visits to these sheds continue to cause parking shortages on busy days at the Transfer Station.

Two household hazardous waste (HHW) collection days were held in the fall ('07) and spring ('08). As in past years, residents of Hadley, Leverett, Pelham and Shutesbury are able to bring their HHW through a cost-sharing agreement with those communities.

Conclusion

The August 2008 launch of the new CivicPlus-powered Town of Amherst website, on which there is an increased recycling/solid waste presence and we will have full editing control, is eagerly anticipated. Meanwhile challenges to the efficacy of Amherst's solid waste program continue to mount. For example, attempts to secure grant or Town funds to purchase a \$50K split truck body, which will enable public area container recycling downtown and in Town parks, reduce composting costs and potentially boost compost activity, have been unsuccessful thus far. The part-time nature of the recycling coordinator position (15 hours per week since 2005) has minimized the resources with which this type of challenge can be met.

Susan Waite
Recycling Coordinator